ABSTRACT

An energy ray sensitive region 11 is divided in its horizontal direction into m columns with the vertical direction as the longitudinal direction, divided in its vertical direction into n rows with the horizontal direction as the longitudinal direction, and is thereby provided with m × n photoelectric conversion portions 13 that are arrayed two-dimensionally. Each of these photoelectric conversion portions 13 generates charges in response to the incidence of energy rays. On the front surface side of energy ray sensitive region 11, a plurality of transfer electrodes 15 are disposed so as to cover energy ray sensitive region 11. The plurality of transfer electrodes 15 are respectively disposed with the horizontal direction as the longitudinal direction and are aligned in the vertical direction. The respective transfer electrodes 15 are electrically connected by voltage dividing resistors 17. Each voltage dividing resistor 17 is disposed in correspondence to each transfer electrode 15, divides a DC output voltage from a DC power supply 19 to generate a DC output potential, and applies this DC output potential to the corresponding transfer electrode 15.